



Field Installation Guide

for Existing Sump Repair and Dispenser Pan Installations

www.sumptite.com

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Personal Safety Considerations:

1. **Sumptite™** Sealant is free of any volatile organic compounds, and mixing this product requires no special breathing apparatus.
2. Safety glasses or goggles should be worn at all times during the mixing of **Sumptite™** Sealant.
3. We recommend a combustible vapor detector (TIF 8800) or equivalent should be used to monitor the atmosphere the entire time that any person is working in a sump.
4. We recommend disposable chemical resistant vinyl gloves (N-Dex Nitrile) or equivalent be worn when working with **Sumptite™** Sealant.
5. We recommend Tyvek suits be worn when installing **Sumptite™** Sealant in a sump to protect clothing and skin.
6. We recommend all contractor employees have training in OSHA confined space entry requirements 29 CFR-1910.146 for sumps requiring confined space entry. All rules and considerations set forth in those guidelines should be followed when required.

There is NO WARRANTY, representation or condition of ANY KIND, expressed or implied. (Including NO WARRANTY OF MERCHANTABILITY OR OF FITNESS) EXCEPT THAT THE MATERIALS SHALL BE OF THE QUALITY SPECIFIED HEREIN, and none shall be implied by law. Except as otherwise provided herein quality shall be in accordance with seller's specifications. Final determination of the suitability of the material for the use contemplated by buyer is the sole responsibility of buyer, and seller shall have no responsibility in connections with such suitability.

This product is intended for use by persons having practical working knowledge of products of this nature. Since Unit Liner Company has no control over storage, handling, use or application of this product, it must disclaim responsibility for any unsatisfactory results obtained.

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results and assume no liability for damages incurred by following these suggestions. Nothing contained herein is to be construed as a recommendation in violation of any patents or of applicable laws or regulations.

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www.sumptite.com

Chemical Resistance Guide

Substance	<i>SumpTite™</i>
Amyl Alcohol	1
ASTM Fuel A	1
ASTM Fuel B	1
ASTM Fuel C	1
ASTM Fuel D	1
Chlorinated Water	1
Cyclohexane	1
Diesel Fuel	1
Diethylene Glycol	1
Ethanol, 100%	1
Fuel Oil	1
Gasoline	1
Hexane	1
Hydrochloric Acid, 20%	2
Isobutyl Alcohol	1
Isopropyl Alcohol	1
Jet Fuel	1
Kerosene	1
Methanol	1
Methyl tert-Butyl Ether, (MTBE) 98%	1
Mineral Spirits	1
Motor Oil 10W/40	1
N-Butyl Alcohol	1
Sulfuric Acid, 20%	1
Water Tap	1
Xylene	3

The data on this chart is based on short term (30 – 60 days) laboratory immersion test in controlled environment (72-77° F). Many factors must be considered when choosing the correct product for an application, including: chemical combinations, operating temperatures, type of substrate and its condition and mechanical abuse. This data should only be used as a guide. It is advisable to test the material under actual, or at minimum, simulated service conditions before specification and use.

Key to Guide Codes

- 1 = Product is suitable for immersion applications.
- 2 = Product is suitable for occasional contact for periods up to 72 hours in duration.
- 3 = Product is suitable for occasional contact for short time periods with frequent washing.
- 4 = Product is not recommended for this application.

SumpTite™ Sealant - Product Review

1. Product Description

Basic Uses

SumpTite™ Sealant is a general purpose sealant which provides a durable elastomeric, water-tight and fuel-tight seal for caulking penetrations and seams in secondary containment where chemical resistance is a primary concern. **SumpTite™** Sealant can be used to seal seams and penetrations on steel, concrete, glass, anodized aluminum, and fiberglass surfaces.

SumpTite™ Sealant maintains an effective bond between materials of similar or dissimilar surface textures.

Limitations:

SumpTite™ Sealant will not bond to polyethylene surfaces.

Packaging:

1 1/2 gallon consisting of base and activator in a 2 gallon pail. Quart can of base accompanied with a jar of activator in separate containers.

Application Standards:

SumpTite™ Sealant meets all aspects of ASTM C 920 Specification for Class 25 Sealants, without primer.

2. Technical Data

SumpTite™ Sealant resists the effects of sunlight, rain, snow, ozone, aging, shrinkage, and the daily and seasonal cyclic changes in temperature, even after years of exposure.

Life Expectancy:

Normal conditions, 15-20 years; severe conditions, 10 years or less.

Typical Properties:

Specific Gravity, mixed	1.48
% Solids	100
% Joint Movement	±25
Hardness, Shore A	40-45
Work Life*	30 min.
Tack-Free	<12 hours
% Elongation	450-500
Tensile Strength, psi	300
100% Modulus, psi	110
200% Modulus, psi	170
Peel Strength, lbs./in.	
On concrete	10
On glass	40
On anodized aluminum	40

* Application life is significantly reduced at elevated temperatures (30 minutes or less above 75° F). Product can be kept on ice to lengthen the application life.

3. Installation

Caution:

Different and unusual building materials, special coatings and/or surface treatments may affect optimum adhesion. In these instances, a field trial is recommended to determine actual adhesions.

Temperature Restrictions:

Substrate temperature must range between 50° F (10° C) and 100° F (43° C) for application.

Precautions:

Personal cleanliness is essential when using sealants. Do not smoke or eat with sealant on your hands. A barrier cream should be used on forearms and hands to remove sealant from skin. This will also protect your hands from the drying effect of solvents used to clean equipment. The use of gloves is preferred for improved hygiene. Wash skin with an industrial hand cleaner (not the solvent or cleaning fluid used to clean equipment). Avoid contact with skin. Any sealant contacting the skin should be removed at once with a clean, dry cloth before using industrial hand cleaner. Prolonged or repeated exposure to **SumpTite™** Sealant may cause skin irritation or allergic reactions. Refer to Material Safety Data Sheet (MSDS) for additional information.

Surface Preparation

Surfaces must be clean, dry, and free from oils, loose soil, waterproofings, or other contaminants. A thorough sanding, buffing, or solvent cleaning may be required to expose clean, sound surfaces.

SumpTite™ Sealant - Product Review Continued

Mixing:

ST-SS-GL- 1 1/2 Gallon Pail:

Secure the pail for mixing either with a device that will hold it in place, or with another person holding it securely. Use the suggested mixing devices from the suggested tools and equipment list (page 6).

Add the content of Part B to the pail of Part A. Remove a small amount of mixture in Part A and mix it with the Part B that is still in the Part B container, remove all that is possible. This will help to ensure that you have removed all of Part B.

Mix thoroughly with an up and down action being careful not to lift the mixer out of the mixture. Make sure that all of the material in the bottom corners of the bucket has been thoroughly mixed. Mixing is completed when the material has a homogeneous gray color with no streaks visible. This process takes about 5 minutes. The product will solidify in 20 minutes to one hour, depending on the temperature. The product will not solidify at temperatures below 40° F.

Clean tools and equipment with solvent. Disconnect all power tools before cleaning. **DO NOT RUN THE ELECTRIC DRILL ONCE THE CLEANING BEGINS!!!** Solvent is flammable and may ignite.

ST-SS-QT- 1 Quart Can:

Empty the can of Part A into a large plastic bowl (Make sure to empty the can completely). Add the contents of the small container of Part B (Make sure to empty the can completely). Remove a small amount of Part A and mix it with the Part B that is still in the Part B container and remove all that is possible. This will help to ensure that you have removed all of Part B.

Using gloved hands or disposable spatulas thoroughly mix the components. Periodically scrape the bottom of the mixing container until there are no streaks. Mixing is completed when the material has a homogeneous gray color with no visible streaks. This process takes about 3 to 5 minutes.

4. Availability and Cost:

SumpTite™ Sealant is available from Unit Liner Company, Shawnee, Oklahoma. For the name and number of the nearest Unit Liner Company **SumpTite™** product line representative, call (800)633-4603 or log on at www.sumptite.com.

5. Maintenance

SumpTite™ Sealant, when installed properly, requires no maintenance; however, if the sealant is damaged and the bond is intact, cut out the damaged area and recaulk. If the bond has been affected, remove the sealant, clean, and prepare the joint in accordance with the instructions under “*Surface Preparation.*”

6. Technical Services

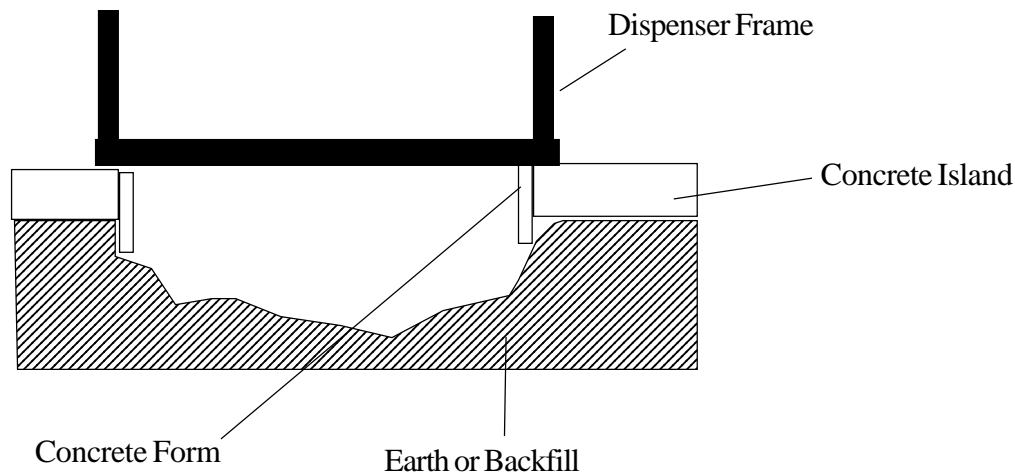
In most areas of the United States Unit Liner Company **SumpTite™** representatives are available to provide assistance. For the name and number of the representative in your area call (800)633-4603, Monday through Friday, Central Standard Time.

Suggested Tools and Equipment

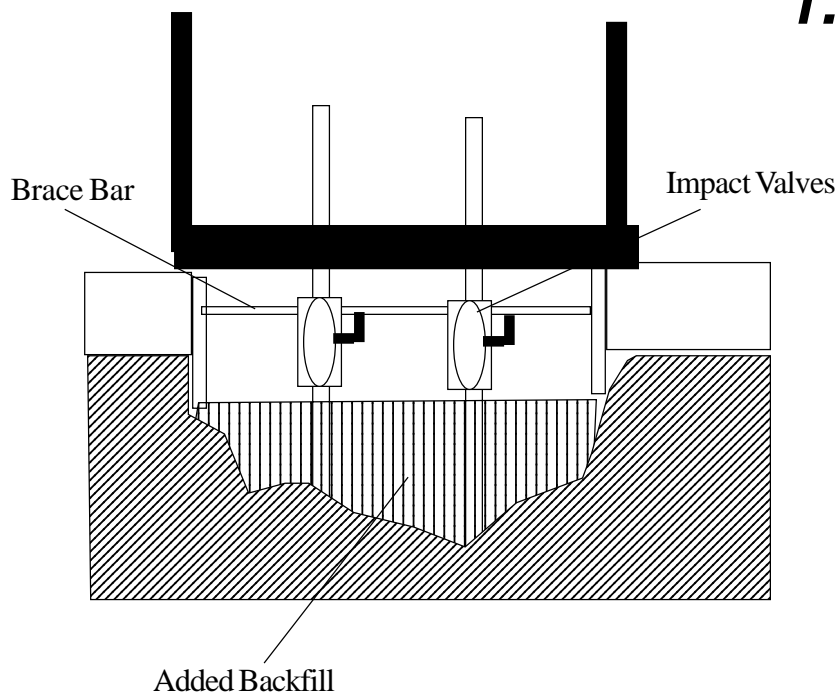
1. Heavy-duty ½” variable speed drill for mixing **SumpTite™** Sealant (1 1/2 Gallon Only).
2. Air powered rotating tool for spark-less brushes.
3. Tyvek coveralls, to protect clothing and skin while in sump. (Sump Repair Only)
4. Spark-less brush for removing rust.
5. Plastic or zero spark scrapers for surface preparation.
6. Heavy duty mixing bit (the Indco HS150- 15”dia is recommended). (1 1/2 Gallon ONLY)
7. Barricades and traffic cones to block off traffic flow at the STP sump and prevent unauthorized entry into the work zone around the sump.
8. Two Fire extinguishers 10 - A:60 - B:C.
9. Long sleeve polyethylene sleeves.
10. Vinyl N-Dex Nitrile gloves are recommended to protect the skin from contact with the product.
11. Drop cloths to protect the concrete from product drips.
12. Solvent for cleaning surfaces and tools.
13. Air compressor
14. Explosion proof shop vac or vacuum unit.
15. A combustible vapor detector (TIF 8800) or equivalent.
16. Disposable paint brushes.
17. Sand blaster with zero spark media.
18. Small mirror for checking for holes.
19. Explosion proof diaphragm pump or vacuum unit for removing water.
20. Set of hand tools for tightening bolts and clamps.
21. Hole Punch.
22. Drill bit stop collar.
23. Eye Protection.
24. Plastic bowls & Rubbermaid spatulas for mixing **SumpTite™** Quart Sealant.
25. 3M Spray Adhesive.

SumpTite™ Dispenser Pan Installation

The following process will remain the same for single product , dual product and multi product dispensers. All work is done through the doors of the dispenser. The dispenser will not need to be disconnected or shut down.

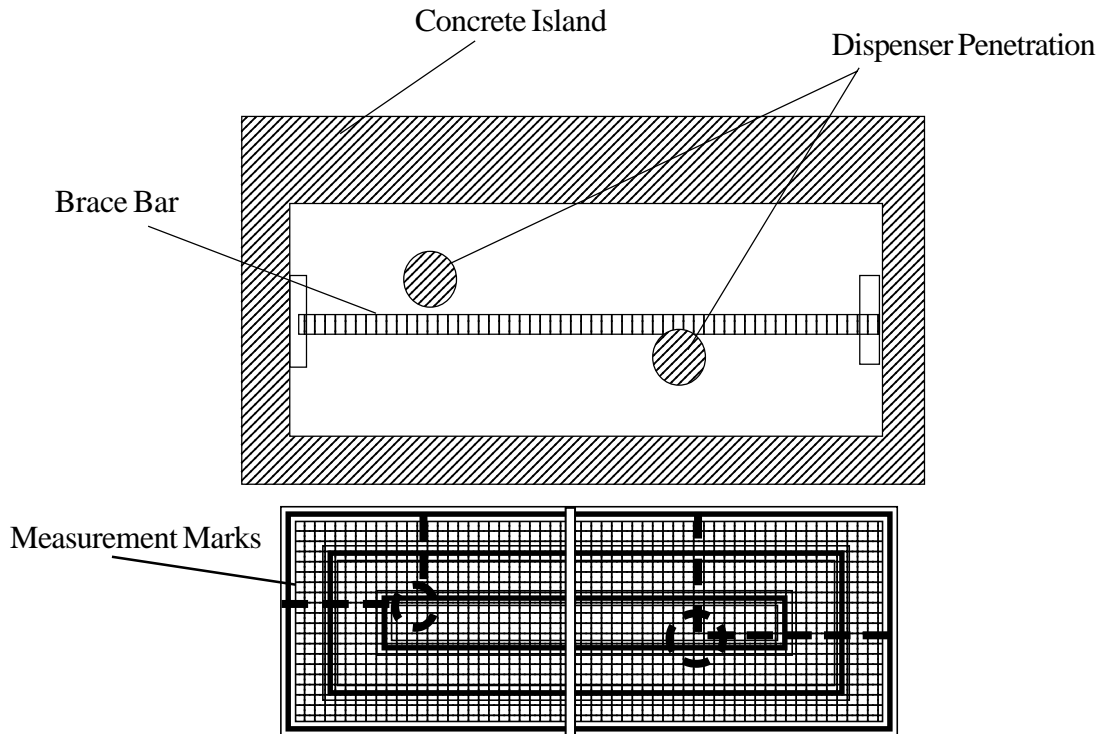


- 1.** Add or remove backfill material to create a level bottom 2" below the bottom fitting of the impact valve.

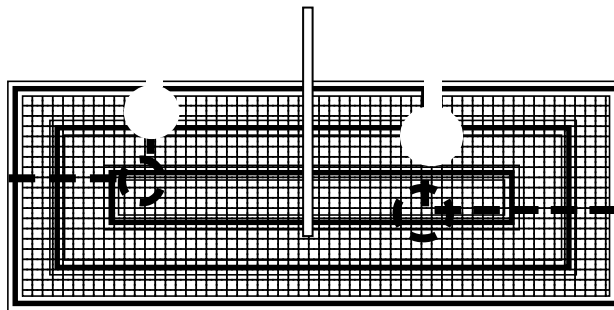


- 2.** Clean the dispenser frame and the base of the penetrations with a cloth or brush to remove any dirt, dust or debris. Select the area to be the main bond line for the system. This will either be the very top portion of the concrete form or the dispenser frame. Thoroughly clean an area 1" wide all the way around the dispenser pan. This area can be cleaned with solvent and/or air blasted with a no spark media.

Top View of Dispenser

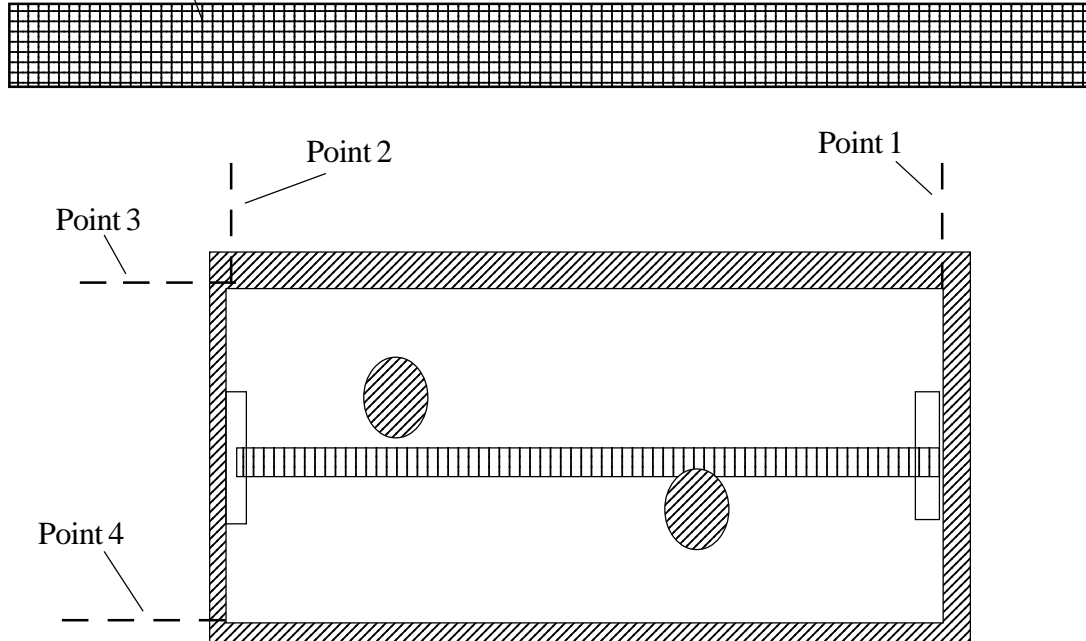


- 3.** Lay the **SumpTite™** Dispenser Pan Bottoms next to the dispenser. Through the doors of the dispenser measure the location of all penetrations. Mark them on the **SumpTite™** Dispenser Bottom with a soap stone or grease pencil. Measurements should be taken from one sidewall to the center of the penetration and one end wall to the center of the penetration.

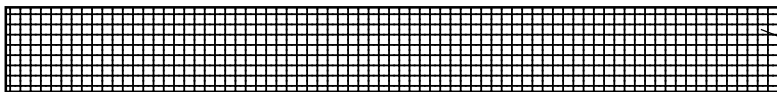


- 4.** Using a razor, knife or sharp bladed instrument, cut a slit into the **SumpTite™** Dispenser Bottom from the sidewall to the penetration point. Then cut out the penetration point as close to the diameter of the penetration as possible. Repeat this process for all penetrations.

SumpTite™ Dispenser Side wall
ST-DS (2" x 23")



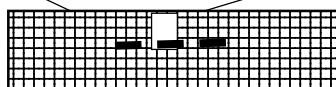
- 5.** Measure and cut the sidewall for placement. Measure from “Point 1” to “Point 2”. Mark that distance on the **SumpTite™** Dispenser Sidewall piece and cut. Then measure from “Point 3” to “Point 4”, mark that distance on the **SumpTite™** Dispenser Sidewall piece and cut.



SumpTite™ Dispenser Sidewall
cut to fit
ST-DS (2" x 23")

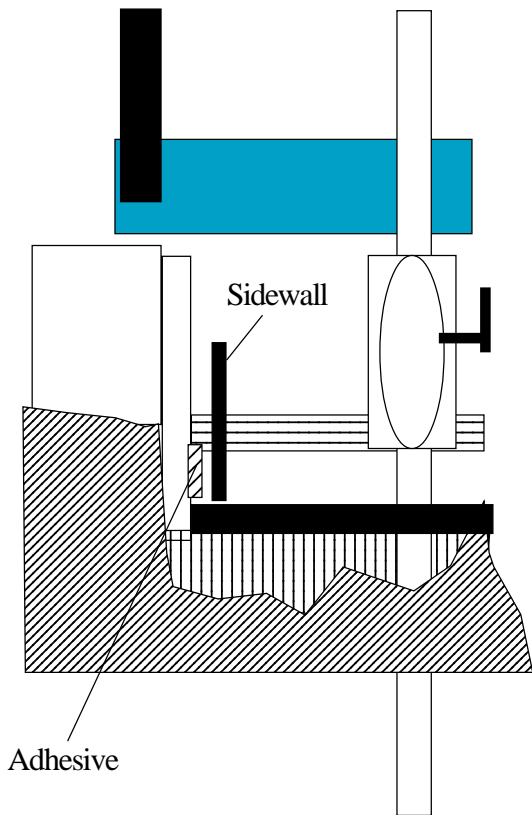
Brace bar bottom mark

Brace Bar Slit



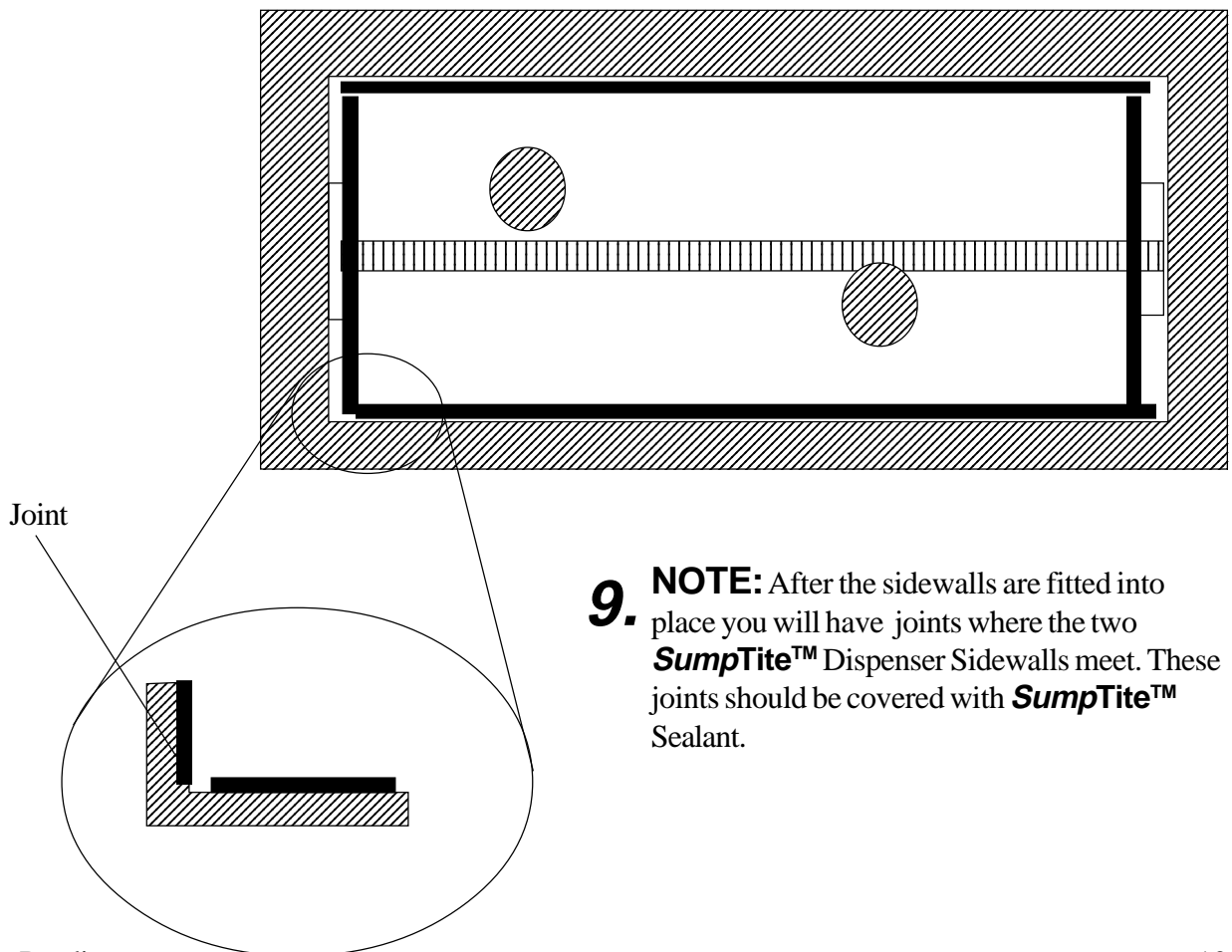
SumpTite™ Dispenser
Sidewall end piece
ST-DS (2" x 23")

- 6.** Lay the **SumpTite™** Dispenser Sidewalls out flat next to the dispenser and measure for the brace bar cut. Measure from the dispenser bottom to the bottom of the brace bar and mark the **SumpTite™** Dispenser Sidewall. Measure from the sidewall (point 3) to the edge of the brace bar. Mark the **SumpTite™** Dispenser Sidewall and cut a slit from the top of the sidewall to the brace bar bottom mark. Then measure from the sidewall (point 4) to the lead edge of the brace bar and mark the **SumpTite™** Dispenser Sidewall and cut a slit down to the brace bar bottom mark. This will ensure that your **SumpTite™** Dispenser Sidewall will fit snugly around the brace bar.



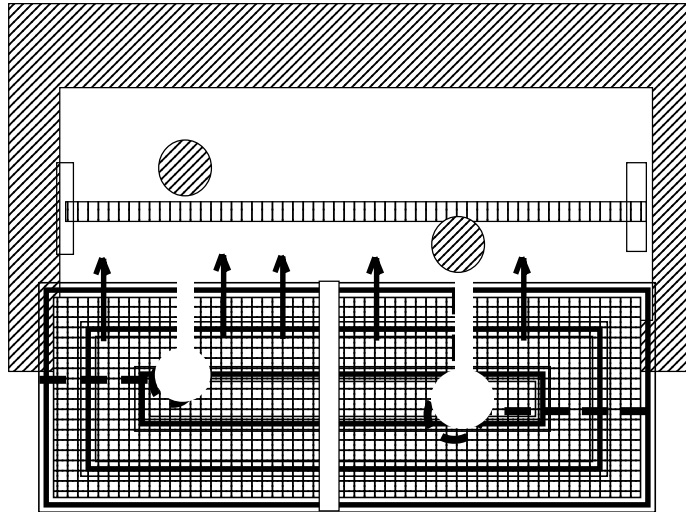
7. Spray adhesive onto the sidewall and create an adhesive band about 1 1/2" thick around the bottom of the sidewall

8. Place the **SumpTite™** Dispenser Sidewall into the area under the dispenser. This is done through the door of the dispenser. Fit the brace bar into the brace bar slit and repeat this process with the other **SumpTite™** Dispenser Sidewalls

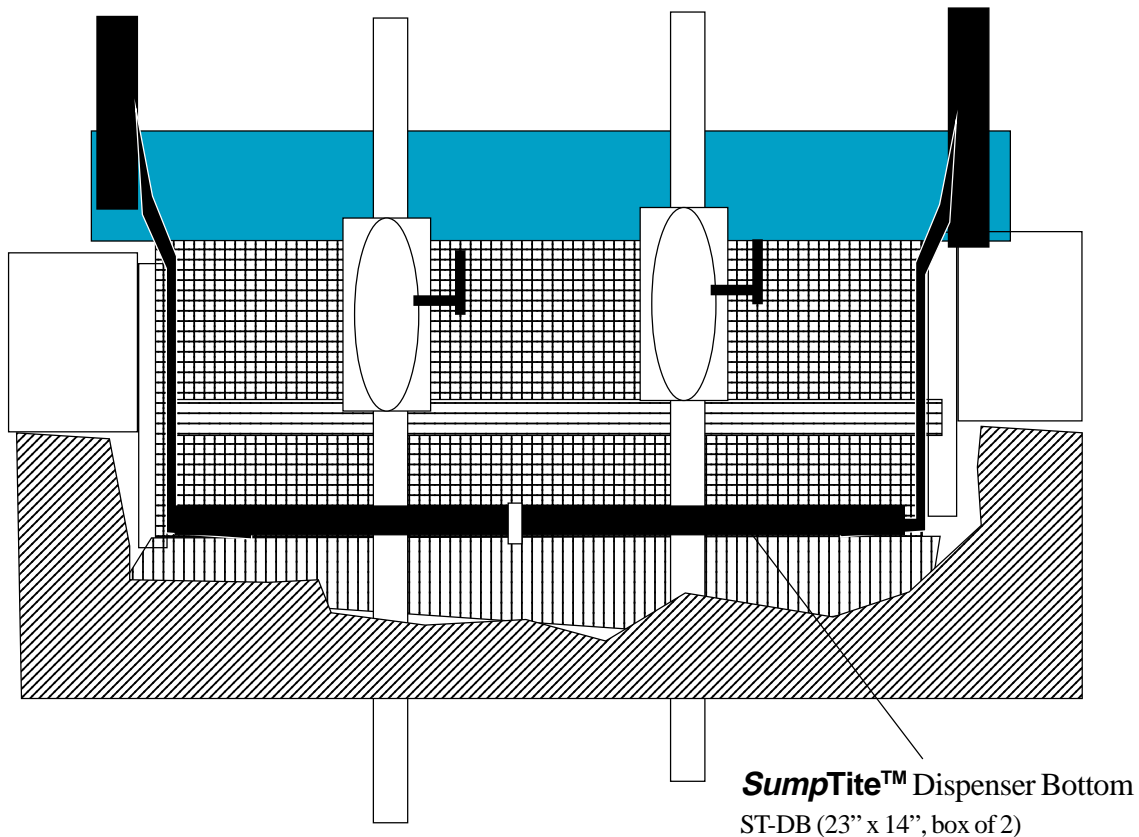


9. **NOTE:** After the sidewalls are fitted into place you will have joints where the two **SumpTite™** Dispenser Sidewalls meet. These joints should be covered with **SumpTite™** Sealant.

- 10.** Slide the **SumpTite™** Dispenser Bottoms through the dispenser door and fit it into place.

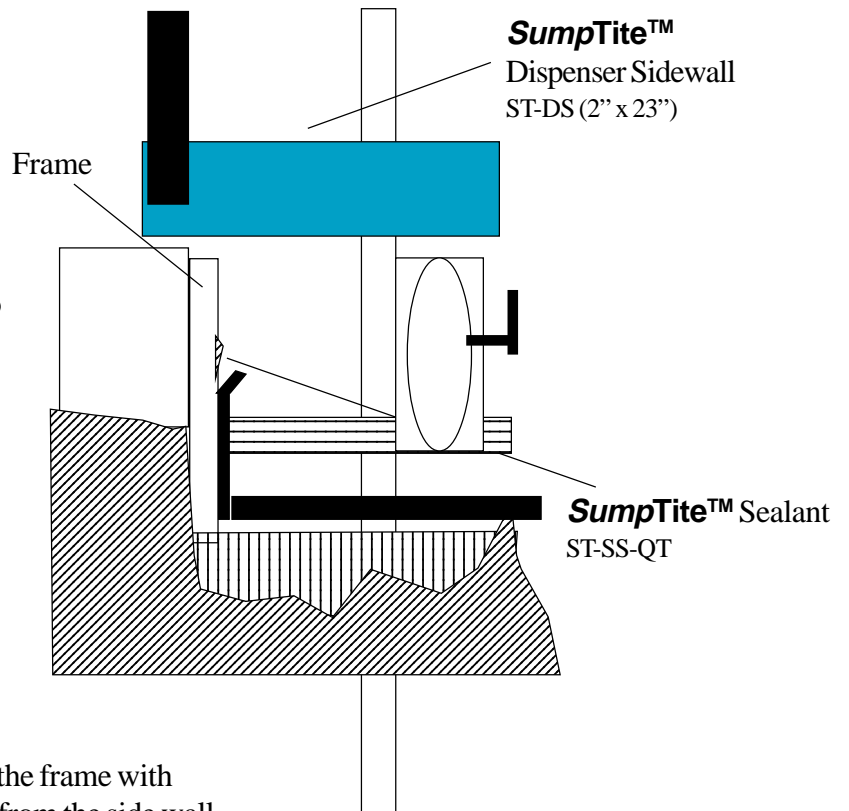


NOTE: The **SumpTite™** Dispenser Bottoms should fit flat and smooth into the dispenser pan.

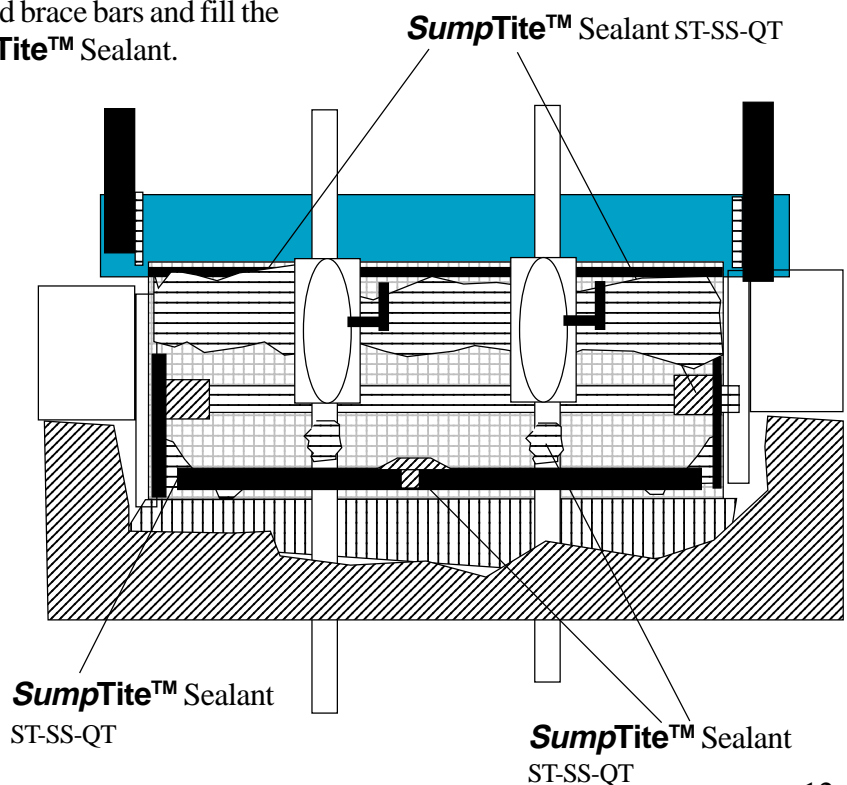


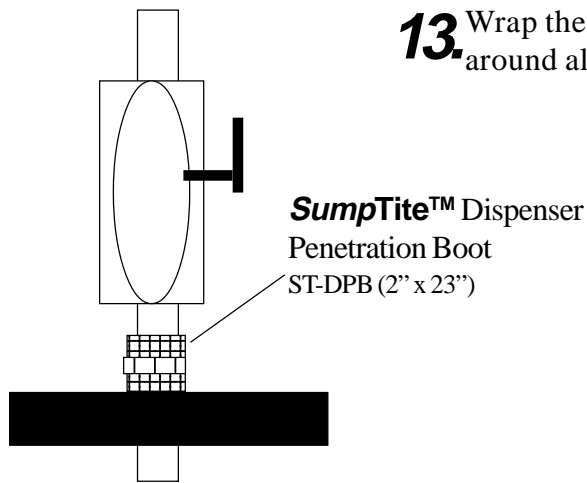
SumpTite™ Dispenser Bottom
ST-DB (23" x 14", box of 2)

- 11.** Fold the **SumpTite™** Sidewall back far enough to expose the frame. Apply a thin layer of **SumpTite™** Sealant to the frame.

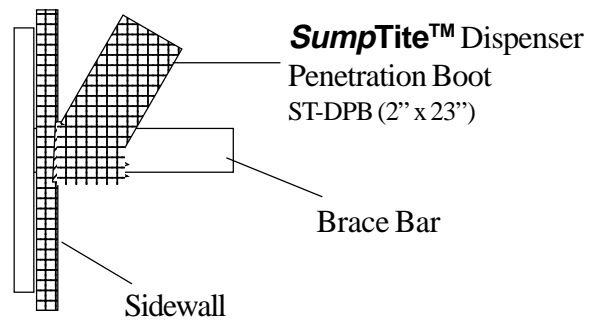


- 12.** Cover the exposed portion of the frame with **SumpTite™** Sealant. Cover from the side wall to the dispenser frame. Fold the **SumpTite™** Dispenser Pan Bottom up and apply a generous layer of **SumpTite™** Sealant between the **SumpTite™** Dispenser Pan Bottom and the bottom flap of the **SumpTite™** Sidewall. Also place a thin layer of **SumpTite™** Sealant at the base of all penetrations and brace bars and fill the bottom seam with **SumpTite™** Sealant.

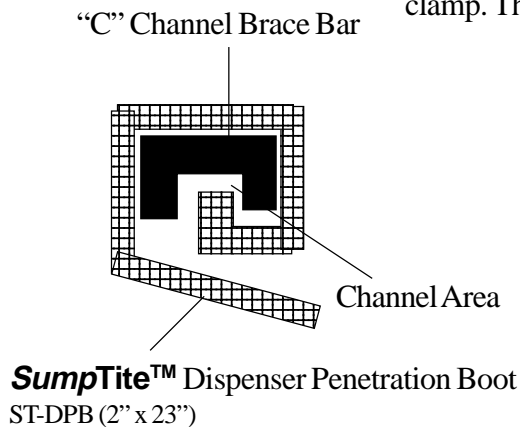




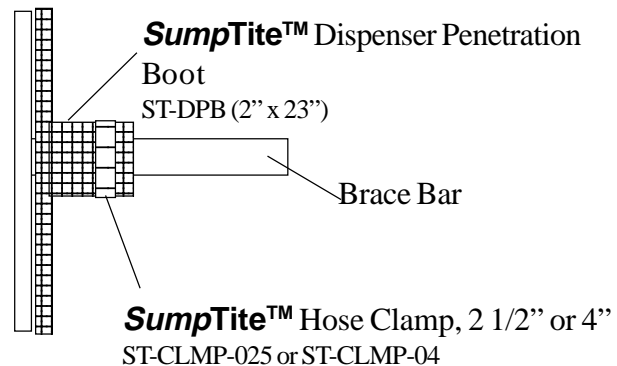
14. Wrap the brace bar ends with a **SumpTite™** Dispenser Penetration Boot.



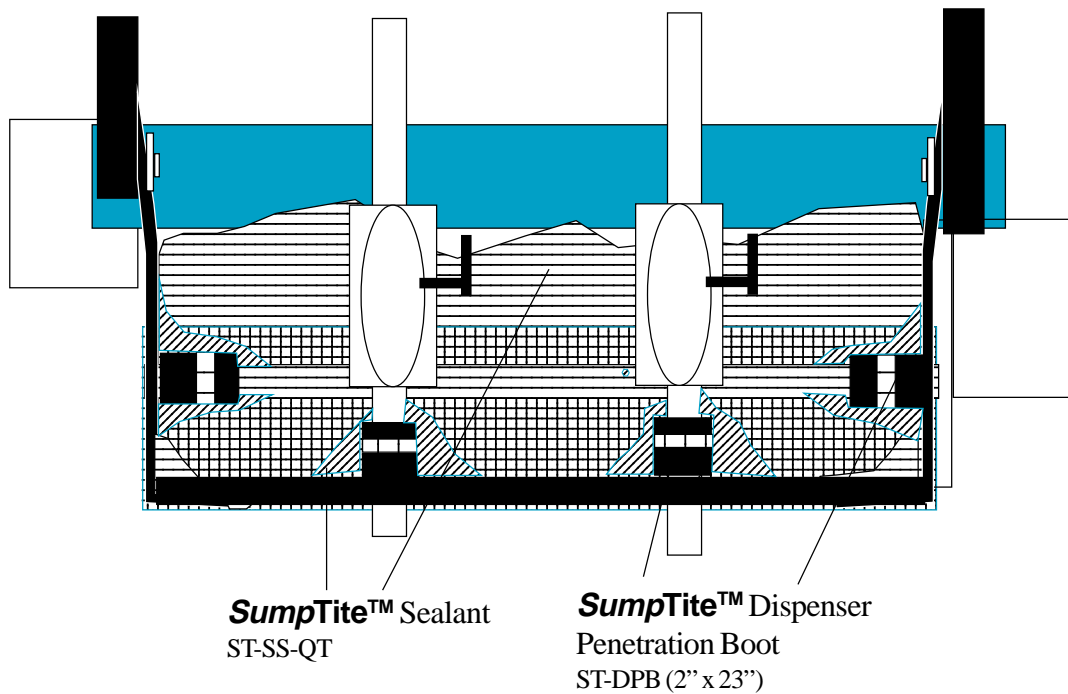
NOTE: If the brace bar is the "C channel" type you must insert the end of the **SumpTite™** Dispenser Penetration Boot into the channel area and wrap it around the brace bar before installing the hose clamp. This will ensure a leak-proof seal.



15. Use a hose clamp to secure the **SumpTite™** Dispenser Penetration Boot to the brace bar.

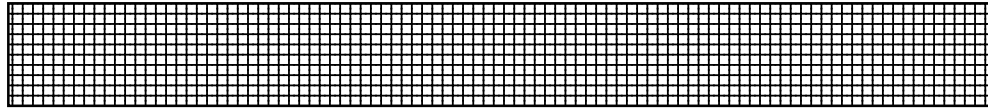


- 16.** Cover all **SumpTite™** Dispenser Penetration Boots and Seams with **SumpTite™** Sealant. Make sure that there are no exposed seams that could be a leak point.

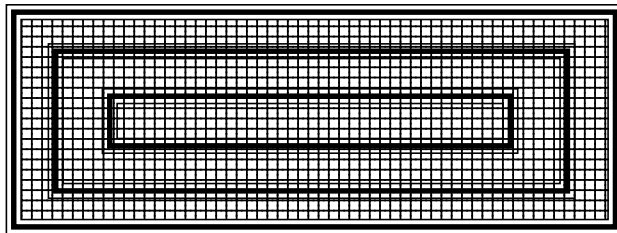


- 17.** Hydrostatic test. Fill the dispenser pan with water to a point just above the highest penetration sealed. Mark the water level, let sit for approximately 1/2 hour, and check to see if the water level has dropped. This completes your installation. Pump out the water and dry the dispenser pans. Or test per California Title CCR, Chapter 16, Section 2637 (a) instead of the procedure just described.

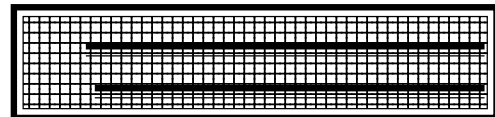
SumpTite™ Dispenser Pan Parts List



SumpTite™ Dispenser Sidewall
ST-DS (2" x 23")



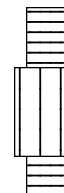
SumpTite™ Dispenser Bottom
ST-DB (23" x 14", box of 2)



SumpTite™ Dispenser Penetration Boot
ST-DPB (2" x 23")



1 Quart Can of
SumpTite™ Sealant
ST-SS-QT



SumpTite™ Hose Clamp,
2 1/2" or 4"
ST-CLMP-025 or ST-CLMP-04



Dispenser Pan Part Numbers

- 1) **ST-K-D Dispenser Kit**

4	ST-DS	Dispenser Sidewall, 2" x 23"
1	ST-DB	Dispenser Bottom, 23" x 14" (box of 2)
3	ST-DPB	Dispenser Penetration Boot, 2" x 23"
2	ST-CLMP-025	Hose Clamp, 2 1/2"
4	ST-CLMP-04	Hose Clamp, 4"
3	ST-SS-QT	Quart of SumpTite™ Sealant

- 2) **ST-K-EPPB EPP Boot Kit**

6	ST-EPPB	EPP Boot
1	ST-EPPBW	EPP Boot Wrap
3	ST-CLMP-06	Hose Clamp, 6"
1	ST-SS-QT	Quart of SumpTite™ Sealant

- 3) **ST-DS Dispenser Sidewall, 2" x 23"**
- 4) **ST-DB Dispenser Bottom, 23" x 14" (box of 2)**
- 5) **ST-DPB Dispenser Penetration Boot, 2" x 23"**
- 6) **ST-EPPB EPP Boot**
- 7) **ST-EPPBW EPP Boot Wrap**
- 8) **ST-CLMP-025 Hose Clamp, 2 1/2"**
- 9) **ST-CLMP-04 Hose Clamp, 4"**
- 10) **ST-CLMP-06 Hose Clamp, 6"**
- 11) **ST-SS-QT Quart of **SumpTite™** Sealant**